IN THE SPECIFICATION:

Please amend the specification as follows.

The paragraph beginning on page 4, line 9 is replaced with the following amended paragraph.

In order to accomplish the above and other related objects, the present invention provides an abnormality detecting apparatus for a vibration-type angular velocity sensor that detects an abnormal condition of the vibration-type angular velocity sensor, including a frequency component extracting means and a judging means. The frequency component extracting means extracts a specific frequency component having the possibility that the angular velocity sensor may produce an erroneous output based on an acceleration signal detected by an acceleration sensor disposed in the vicinity of the vibration-type angular velocity sensor. And, the judging means compares a level of the specific frequency component extracted by the frequency component extracting means with a predetermined level and produces a signal notifying of an abnormal condition of the angular velocity sensor when the level of the specific frequency component is larger than the predetermined level.

The paragraph beginning on page 5, line 24 is replaced with the following amended paragraph.

Furthermore, to accomplish the above and other related objects, the present invention provides an abnormality detecting method for a vibration-type angular velocity sensor that detects an abnormal condition of the vibration-type angular velocity sensor, including a step of extracting a specific frequency component having the possibility that the angular velocity sensor may produce an erroneous output based on an acceleration signal detected by an acceleration

sensor disposed in the vicinity of the vibration-type angular velocity sensor, and a step of comparing a level of the extracted specific frequency component with a predetermined level and producing a signal notifying of an abnormal condition of the angular velocity sensor when the level of the specific frequency component is larger than the predetermined level.

The paragraph beginning on page 7, line 20 is replaced with the following amended paragraph.

Furthermore, the present invention provides an abnormality detecting program executed in a computer for realizing an abnormality detecting method for a vibration-type angular velocity sensor that detects an abnormal condition of the vibration-type angular velocity sensor. The abnormality detecting method includes a step of extracting a specific frequency component having the possibility that the angular velocity sensor may produce an erroneous output based on an acceleration signal detected by an acceleration sensor disposed in the vicinity of the vibration-type angular velocity sensor, and a step of comparing a level of the specific frequency component extracted in the frequency component extracting step with a predetermined level and producing a signal notifying of an abnormal condition of the angular velocity sensor when the level of the specific frequency component is larger than the predetermined level.

The paragraph beginning on page 8, line 6 is replaced with the following amended paragraph.

Furthermore, the present invention provides a vehicle control system including an abnormality detecting apparatus that detects an abnormal condition of a vibration-type angular velocity sensor, an actuator that executes a brake control of the vehicle, and a vehicle stability

control apparatus that manages the brake control executed by the actuator. The abnormality detecting apparatus including a frequency component extracting means for extracting a specific frequency component having the possibility that the angular velocity sensor may produce an erroneous output based on an acceleration signal detected by an acceleration sensor disposed in the vicinity of the vibration-type angular velocity sensor, and a judging means for comparing a level of the specific frequency component extracted by the frequency component extracting means with a predetermined level and producing a signal notifying an abnormal condition of the angular velocity sensor when the level of the specific frequency component is larger than the predetermined level. The vehicle stability control apparatus limits the brake control executed by the actuator when the vehicle stability control apparatus receives the signal notifying of the abnormal condition of the angular velocity sensor from the abnormality detecting apparatus.

The paragraph beginning on page 13, line 11 is replaced with the following amended paragraph.

More specifically, as explained later with reference to Fig. 2, the first window comparator 23 detects the condition that the output signal Vs1 of the First BPF 21 satisfies the relationship Vs1 > Vr1 or Vs1 < Vr2, and the second window comparator 24 detects the condition that the output signal Vs2 of the second BPF 22 satisfies the relationship Vs2 > Vr3 or Vs < Vr4. A sum of the outputs of first and second window comparators 23 and 24 is detectable as a logical sum (OR) appearing on the pull-up resistor R, and is output as a diagnostic signal Vd. The diagnostic signal Vd serves as a signal notifying of the abnormal condition of the angular velocity sensor 1.

The paragraph beginning on page 14, line 24 is replaced with the following amended paragraph.

The first window comparator 23 has a function of checking whether or not the output signal Vs1 exceeds a predetermined threshold value, while the second window comparator 24 has a function of checking whether or not the output signal Vs2 exceeds a predetermined threshold value. More specifically, the first window comparator 23 produces an output signal of Lo(GND) level when the output signal Vs1 is higher than the reference voltage Vr1 or lower than the reference voltage Vr2 and otherwise produces an output signal of Hi(Vcc) level. Similarly, the second window comparator 24 produces an output signal of Lo(GND) when the output signal Vs2 is higher than the reference voltage Vr3 or lower than the reference voltage Vr4 and otherwise produces an output signal of Hi(Vcc) level. The diagnostic signal Vd, representing the logical sum (OR) of the output signals of first and second window comparators 23 and 24, becomes an output signal of Lo(GND) level notifying of the abnormality of the angular velocity sensor when the driving system resonance frequency fd deviates from a predetermined range defined by the predetermined threshold levels or when the difference frequency Δf between the driving system resonance frequency and the sensing system resonance frequency deviates from a predetermined range defined by the predetermined threshold levels.

The paragraph beginning on page 18, line 10 is replaced with the following amended paragraph.

Then, in step S404, the calculate Xfd is compared with a predetermined value Vr. When the relationship Xfd>Vr is satisfied (i.e. YES in step S404), it is judged that the vibration having the frequency band of the frequency fd is input into the angular velocity sensor 1 and accordingly

an abnormality flag is set in step S405. On the other hand, when the relationship Xfd≦Vr is satisfied (i.e. NO in step S404), the abnormality flag is reset in step S406. In this manner, through the algorithm used by the microcomputer 30, the second embodiment makes it possible to calculate the signal equivalent to the diagnostic signal of the first embodiment (i.e. a signal notifying of the abnormal condition of the angular velocity sensor).